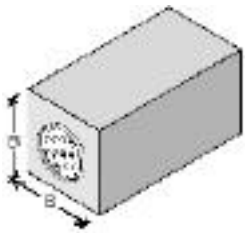
Vibro-Acoustics®

CERTIFIED PERFORMANCE DATA

HOW TO SPECIFY: EXAMPLE

12 X CNM-UHV-F1 X 72

Duct Connection Size — Silencer Model — Silencer Length



Insertion Loss (IL)

+ : "forward flow" where noise & airflow move in same direction (e.g. supply side)
- : "reverse flow" where noise & airflow move in opposite directions (e.g. return side)

LENGTH (inches)	FACE VELOCITY (feet per minute)	OCTAVE BAND - Hz/DYNAMIC INSERTION LOSS (dB)							
		63	125	250	500	1000	2000	4000	8000
36	- 2500	9	10	27	7	5	5	4	5
	0	8	9	22	7	6	6	5	5
	+ 2500	8	9	23	7	5	6	5	3
48	- 2500	10	11	30	9	7	7	5	5
	0	9	10	26	9	8	7	6	6
	+ 2500	10	11	27	10	7	7	6	5
60	- 2500	10	13	33	11	9	8	7	6
	0	10	11	29	11	10	9	7	7
	+ 2500	11	13	31	12	10	9	7	6
72	- 2500	11	15	36	13	11	10	8	7
	0	11	12	32	12	12	10	8	7
	+ 2500	12	14	35	14	12	10	8	7

See pages 4.1 - 4.25 for selection information.

Pressure Drop (PD)

DUCT CONNECT. SIZE (in.)	B x B (in.)	SILENCER LENGTH (in.)	WEIGHT (lbs)	FACE VELOCITY (feet per minute) / Pressure Drop (in.w.g.)						
				2000	2250	2500	2750	3000	3250	3500
12	30x30	36	98	0.12	0.15	0.19	0.23	0.27	0.32	0.37
12	30x30	48	128	0.12	0.15	0.19	0.23	0.27	0.32	0.37
12	30x30	60	158	0.12	0.15	0.19	0.23	0.27	0.32	0.37
12	30x30	72	188	0.12	0.15	0.19	0.23	0.27	0.32	0.37

Pressure drops are reported in accordance with ASTM E477 methods and are based upon IDEAL flow conditions (5 diameters of straight duct on silencer inlet and 10 on outlet). Less than ideal conditions will result in an increase in pressure drop due to System Effects. See Silencer System Effects Data on page 4.19.

: Acceptable (0 - 0.35")

: Caution (>0.35") Pressure Drop may be too high for certain applications

Generated Noise (GN) @ 0.79 sq.ft. face area

LENGTH (inches)	FACE VELOCITY (feet per minute)	OCTAVE BAND - Hz/GENERATED NOISE (dB re 10^{-12} watts)							
		63	125	250	500	1000	2000	4000	8000
ALL	- 3000	60	60	58	56	56	60	52	38
	- 2000	58	55	50	48	46	42	36	34
	+ 2000	56	59	46	47	46	44	45	40
	+ 3000	61	66	51	53	52	54	57	50